



**DEBRA BOWEN** | SECRETARY OF STATE | STATE OF CALIFORNIA  
1500 11th Street, 6th floor | Sacramento, CA 95814 | Tel (916) 653-7244 | Fax (916) 653-4620 | [www.sos.ca.gov](http://www.sos.ca.gov)

January 15, 2009

The Honorable Noreen Evans, Chair  
Assembly Budget Committee  
State Capitol, Rm 6026  
Sacramento, CA 95814

The Honorable Denise Ducheny, Chair  
Senate Budget and Fiscal Review Committee  
State Capitol, Rm 5035  
Sacramento, CA 95814

Dear Chairwoman Evans and Chairwoman Ducheny:

Attached please find a copy of a status report on the Help America Vote Act (HAVA) activities carried out over the past calendar year pursuant to budget control language adopted under Item Number 0890-001-0890, Provision 4 of the 2008-09 Budget.

I hope you will find the report informative and helpful in understanding the Secretary of State's progress to date on HAVA activities, as well as the upcoming challenges. If there are any questions from your office about this report, please feel free to contact me at (916) 651-7837.

Sincerely,

Chris Reynolds

Deputy Secretary of State, HAVA Activities

Cc: The Honorable Robert Dutton, Vice Chair, Senate Budget and Fiscal Review Committee  
The Honorable Roger Niello, Vice Chair, Assembly Budget Committee  
The Honorable Warren Furutani, Chair, Assembly Elections and Redistricting Committee  
The Honorable Loni Hancock, Chair, Senate Elections, Reapportionment and Constitutional Amendments Committee  
The Honorable Juan Arambula, Chair Assembly Budget Subcommittee, State Administration  
The Honorable Mark DeSaulnier, Chair, Senate Budget Subcommittee, State Administration  
Mr. Mac Taylor, Legislative Analyst  
Mr. Michael Genest, Director, Department of Finance

**Status Report: Help America Vote Act of 2002 (HAVA) related activities for  
Calendar Year 2008**

Pursuant to Budget Control Language, the Secretary of State is required to report, by January 15<sup>th</sup> of each year, on the following activities, until the Statewide Voter Registration Database, required by Section 303 of HAVA, is fully implemented. This status report is required to address the following areas:

- Election system security measures, including: (1) Source Code Review; (2) Parallel Monitoring; and (3) Poll Monitoring;
- The expected General Fund exposure for completion of HAVA compliance, including expected costs of administration; and
- Completion of the VoteCal database, including information on the costs associated with the use of contractors and consultants, the names of the contractors and consultants used, and the purposes for which contractors and consultants were used.

The information contained herein comprises the third annual status report.

**Election system security measures**

Source Code Review – The Secretary of State approves escrow facilities for voting system manufacturers to deposit their source code into as required by law and verifies the source code has been deposited into an approved escrow facility. In addition, the Secretary of State:

- Monitors escrow of source code in approved CA facilities (EC §19103)
- Inspects and certifies escrow facilities (CA Code of Regulations, Title 2, §20630-20682)
- Receives and distributes trusted builds of source code to voting jurisdictions
- Maintains records of voting systems in use.

In 2006-07, the Secretary of State entered into an Interagency Master Agreement (IMA) with the University of California to secure educational, training or research services in the areas of computer science and voting system technology, including the development of source code review guidelines, practices and protocols.

Pursuant to direction provided by the Legislature, which added HAVA funding to the Secretary of State's budget for source code review of voting systems during the 2006-07 budget process, the Secretary of State undertook a top-to-bottom review of voting systems in 2007. Using the funding provided by the Legislature and funding from voting system vendors that was required as a condition of their

prior voting system approval, the Secretary of State commissioned, under the auspices of the University of California, a top-to-bottom review of voting systems through the IMA. That review also included, for the first time, accessibility testing as a separate, specific component of the testing process.

The top-to-bottom review was launched in response to years-long serious, yet unresolved, questions about voting system reliability and security. At the center of the question was the issue of transparency. The reliance on proprietary source code for electronic voting systems, including direct-recording-electronic (DRE) machines, precluded a complete, open, public examination of the voting systems and many questioned the ability of these voting systems to protect the security of the vote.

Under the top-to-bottom review, each voting system vendor was offered the opportunity to subject its approved system to the top-to-bottom review, or to forgo the review based on representations from the vendor that it would bring forward a new, upgraded voting system for testing in time for use during the 2008 election cycle. The Secretary of State reserved the right to impose new, additional conditions on the use of any existing voting system if the vendor failed to bring forward a new system for approval testing as promised.

On August 3, 2007, the Secretary of State released the results of the top-to-bottom review. Based on the findings in the review, the Secretary withdrew approval of three voting systems subjected to the review, and simultaneously re-approved their use, subject to stringent new conditions. Reports and the withdrawal/approval orders issued in accordance with the findings of the top-to-bottom review can be found on the Secretary of State's website at [http://www.sos.ca.gov/elections/elections\\_vsr.htm](http://www.sos.ca.gov/elections/elections_vsr.htm).

In short, computer scientists discovered, documented and, in some cases, demonstrated source code and physical security vulnerabilities that called into question the security of the voting systems. The review cast doubt on the ability to prevent exploitation of these vulnerabilities, or to detect after the fact that these vulnerabilities had been exploited. In fact, these vulnerabilities were shown as a path to manipulate voting systems in ways that could affect the outcome of an election. Furthermore, the review found that malicious software code might propagate throughout an entire voting system, including infecting the central tabulation system. Based on these findings, the Secretary of State's re-approval orders restricted the use of two manufacturers' DRE voting machines (the Sequoia Voting Systems, Inc., Edge I and II v.5.0.24 and the Premier Election Solutions, Inc., AccuVote TSX v. 4.6.4) to allow only one such voting machine per precinct, which is the minimum number required by the HAVA 301 (a)(3) accessibility requirements. Where counties had previously deployed additional DRE voting units at the precinct, they were left with a choice to provide optical scanners in the precincts or at a central location to tally votes cast on mark-sense paper ballots. Additionally, the Secretary of State imposed new

security measures on all systems to limit and prevent potential exploitation of voting system source code vulnerabilities. In collaboration with county election officials and voting system vendors, new use procedures were crafted to ensure consistent, uniform implementation of security measures. Finally, new, more stringent post-election auditing requirements of election results were put in place and adopted via emergency regulations in 2008 to ensure that tampering or errors did not produce incorrect outcomes in close contests.

The movement away from DRE voting that followed the Secretary of State's top-to-bottom review reflects a similar trend in states such as New Mexico, Florida, Iowa and Maryland. The findings of the top-to-bottom review have been largely replicated and confirmed by similar expert testing and analysis of electronic voting systems carried out by the states of Ohio and Colorado.

California's voting system testing and approval process has been modified to be consistent with and include the practices and procedures employed in the top-to-bottom review. Any new voting system brought forward for approval is now subject to a testing and approval process that incorporates the protocols for source code review used in the top-to-bottom review.

In 2008, the Secretary of State also sponsored legislation on voting system security that was signed into law. AB 3026 (Saldana) expands to all voting systems a prohibition on Internet connections and wireless transfers to or from DRE voting systems. AB 2578 (Krekorian) clarifies and expands a requirement that vendors provide a copy of ballot tally software for approved voting systems by requiring that the source code be provided by the federal authority or the federally approved independent laboratory that tested and approved the voting system to ensure the source code is an exact copy of the federally approved source code. Additionally, the law now includes requirements to deposit source code for all approved voting system components and instructions on building and configuring the voting system to allow independent verification that the voting system in use is the voting system approved for use at the federal and state levels.

Parallel Monitoring – Parallel monitoring programs were conducted under previous administrations prior to the conditions imposed by the top-to-bottom review as described above. On November 11, 2007, AB 917 was chaptered, which provides for parallel monitoring to be conducted in counties with more than one DRE voting system per precinct. No such voting system or circumstances exist in the state. The Secretary of State received a General Fund appropriation of \$101,000 to conduct a parallel monitoring program for the November 4 General Election. However, based on the fact that the circumstances described in AB 917 do not exist, the fact that past experience conducting parallel monitoring shows it takes at least nine weeks for the Secretary of State to advertise, competitively bid and execute a contract to conduct parallel monitoring for a General Election, and that the 2008-09 budget, which included funding for

parallel monitoring, was enacted on September 23, 2008 – six weeks before the November 4, 2008 General Election – no parallel monitoring program was conducted during the 2008 election cycle.

Election Day Observation (Poll Monitoring) – Election Day Observation (Poll Monitoring) was conducted during the February 5, 2008, Presidential Primary, the June 3, 2008, Statewide Direct Primary and the November 4, 2008, General Election.

In February, the Secretary of State sent 37 observers to 31 counties on Election Day.

In June, attention was refocused on poll worker training activities and follow-up was provided by sending observers to counties on Election Day. Secretary of State employees who had previously served as observers attended training classes in 38 counties and 10 observers visited 18 counties on Election Day.

In November, experienced observers were sent to five of the most populous counties.

The reports for these activities are posted on the Secretary of State website at [http://www.sos.ca.gov/elections/voting\\_systems/historic/historic\\_pm.htm](http://www.sos.ca.gov/elections/voting_systems/historic/historic_pm.htm)

### **Expected General Fund exposure for completion of HAVA compliance**

The 2006 election cycle was the first election cycle during which county elections officials were required to comply with the full complement of HAVA requirements. To help counties meet these requirements, the prior Secretary of State executed contracts with county elections officials in 2005 related to upgrade of voting systems.

The voting system upgrade contracts provide reimbursement to counties for the cost to upgrade local voting systems or to purchase or lease new voting systems to meet new federal voting system standards. No General Fund exposure is expected for current or future activities relating to voting system requirements.

An interim solution to meet the requirements of Section 303 of HAVA for a statewide voter registration database was implemented pursuant to a Memorandum of Agreement (MOA) executed with the U.S. Department of Justice (US DOJ) – the enforcement authority for HAVA – on November 2, 2005. The interim solution database is fully operational. No General Fund exposure is expected for the activities related to the interim solution.

Contracts have been executed with California's 58 counties to reimburse efforts to improve physical access to polling places for voters with disabilities. No

General Fund exposure is expected for the activities related to improving polling place accessibility.

The following ongoing needs are associated with the administration of the HAVA program:

Internally, ongoing Secretary of State staffing costs are estimated at \$1.7 million for the next two fiscal years. This funding supports staff working on HAVA activities, a portion of the cost of voting system testing and approval personnel, and administrative support (budgeting, accounting, and contracting services) for:

- Tracking and implementing changes to federal voting system testing and approval protocols and voting system standards;
- Activities related to further modifications to the statewide voter registration database project;
- Review and payment of claims for reimbursement against voting system upgrade contracts and contracts executed to improve polling place accessibility; and
- Reporting to state and federal agencies as required.

While these near-term costs associated with HAVA implementation are a certainty, long-term estimates are difficult to project at present because they may be affected by evolving federal standards and programs, including new oversight activities.

### **Completion of VoteCal database**

As previously indicated, California achieved "interim compliance" with HAVA Section 303 requirements to establish a statewide voter registration database. However, under the MOA executed with the U.S. Department of Justice, California is required to establish a long-term, fully compliant statewide database referred to as the VoteCal project.

At present, the Secretary of State is engaged in a competitive bidding process for award of a bid for the VoteCal project. For the foreseeable future there is a continuing need for internal Secretary of State staffing including:

- Elections Division (program) support to maintain the interim database and to assist in planning for a fully-compliant voter registration database;
- Information Technology Division (technical) support to maintain the interim database and to assist in planning for a fully-compliant voter registration database;
- Administrative support (budgeting, accounting and contracting services) for activities related to planning and executing a contract for modifications to the statewide voter registration database.

The potential project cost and ongoing costs for a long-term solution are highly dependent on the business rules, program requirements and vendor response to the procurement process. The approved Feasibility Study Report (FSR) for the project proposed a "solution-based" procurement, which will allow vendors to propose a variety of alternative solutions to meet the state's business and functional requirements. The procurement process for the VoteCal project is nearing conclusion. Cost projections in that FSR were based upon the best available estimates for one of the most costly acceptable alternatives. Current and near-term costs estimates in that FSR for contractor and consultant needs to support the long-term project, include:

- A contract project manager (contract amount of \$1,043,440 with Kiefer Consulting for services of Linda Wasik as project management consultant);
- Consultant support for drafting the project Request for Proposal and Special Project Report (contract amount of \$377,865 with R&G Associates for services of Linda Van Dyke and Jeff Scheel);
- Project administrator/librarian (contract amount of \$243,168 for services of Melissa Crowley);
- Required Independent Project Oversight Consulting (contract amount of \$762,900 with Continuity Consulting for services of Joan Rene, Tim Jacobs, and Christine Walker);
- Required Independent Verification and Validation Consulting (contract amount of \$846,715 with Information Integration Innovation & Associates for services of Dr. Michael Cox, Arthur G. Mulligan, Al Pangelinan, and Paula Grose)

Only the contracts for the project manager, RFP and vendor consultant, Project Oversight, Independent Verification and Validation, and Project administrator/librarian consultants have been executed to date.

Contracts for the primary system integration vendor and for the consultants to modify interfaces will not be executed until the procurement process has been completed, and a Special Project Report (SPR) is submitted to and approved by both the Department of Finance and the Legislature. The need for some of the other contractors may be reduced or eliminated, depending upon the solution proposed by the selected system integration contractor.

The costs identified above are funded with federal HAVA resources allocated to California. Potential General Fund exposure is impossible to project at this time with any certainty. At present, the operation of the statewide database relies heavily on integration and synchronization with local election management systems. The costs to maintain and operate local EMSs are the responsibility of the counties. Depending on the long-term solution that is developed, the state will likely incur some future General Fund liability associated with continued operation and maintenance of the VoteCal statewide voter registration database

because one-time HAVA funding will be exhausted eventually. When that will occur depends on two items that won't be known until 2009 – the cost of establishing the VoteCal system and the annual maintenance and operation costs associated with it.